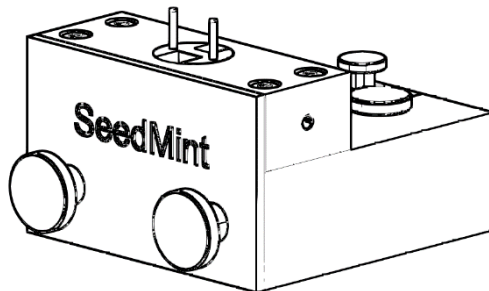


SEEDMINT

MANUAL



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INTRODUCTION

This is a 100% private offering. No safety labels, no security checks, no warranty, no refund, no guarantees - just two plebs' word.

SEEDMINT is a FREE OPEN SOURCE HARDWARE (FOSH) Product published under the MIT license. Technical drawings, material specifications and information regarding standard parts as well as this manual can be found at:

<https://github.com/SeedMint>

Adequate personal bitcoin security is a daunting challenge - one that will not forgive many mistakes. Every user's situation regarding technical understanding and personal priorities, threat model and risk tolerance is fundamentally unique which renders generalized advice insufficient at best, dangerously confusing at worst.

To achieve a level of security you can feel comfortable with you must find the right trade-off between cost, privacy, complexity, and failure tolerance.

We cannot tell you what is best for your individual situation, but we can do our best to provide tools to aid you on your journey. The first of these tools is the SEEDMINT.

PURPOSE

The SEEDMINT is a tool designed to easily secure your 12 or 24 bitcoin backup words (mnemonic seed phrase) on highly durable V4A stainless steel washers.

Using the included punches (4mm numbers & 2mm letters/numbers) you can stamp the index number (01 to 24) as well as the significant characters (first four letters) of each word onto one washer. This will result in 12 or 24 stamped washers.

Additional washers can be stamped with any relevant information you would like to secure in combination with your seed. This additional information may include but is not limited to: seed creation date, seed creation block height, master fingerprint,

derivation path, wallet name, passphrase, multisig scheme, or xpub. The stamped washers can be held on a V4A stainless steel screw, fastened by a self-locking nut (included in the package) and stored in a secure location as an ultimate backup.

The above description is the use case we envisioned as a basis for the design of the SEEDMINT and is merely a recommendation. At the end of the day, it is up to you which information you would like to stamp on the washers and how you choose to store them.

PACKAGE CONTENT

1x	SEEDMINT
1x	Set of 4mm number punches
1x	Set of 2mm number punches
1x	Set of 2mm letter punches
1x	Silicon oil 65ml
210x	M6 V ₄ A stainless steel washers
3x	M6x60 V ₄ A stainless steel screws
3x	M6x30 V ₄ A stainless steel screws
6x	M6 V ₄ A stainless steel self-locking bolt

SEEDMINT - PART LIST

Milled parts:

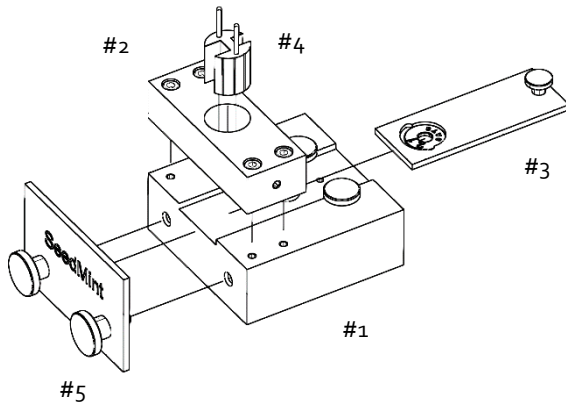
#1 BASE

#2 RETAINER

#3 SLIDER

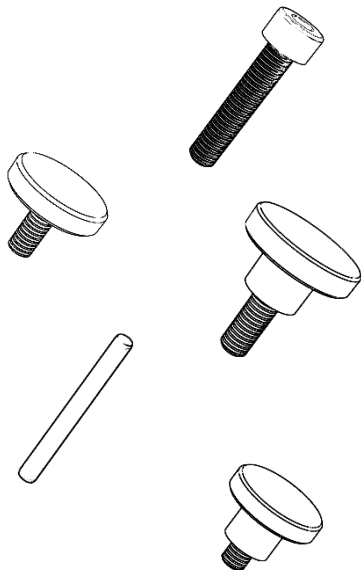
#4 GUIDE

#5 FACEPLATE

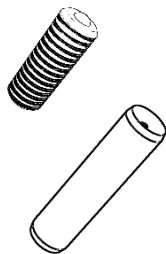


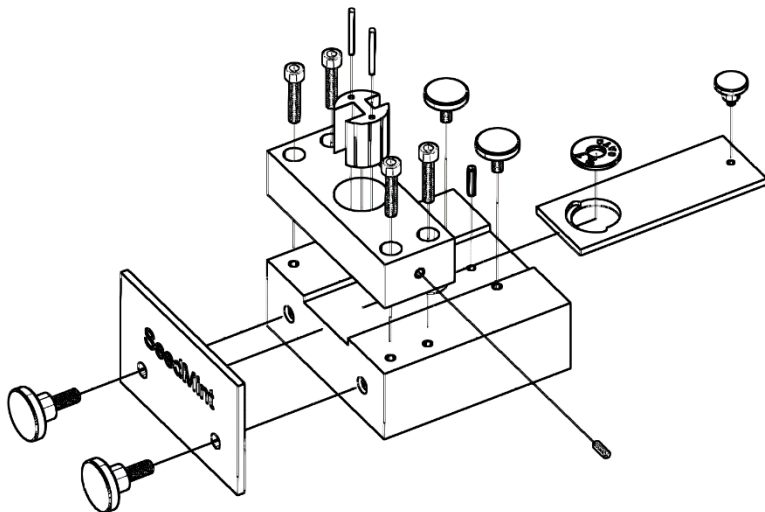
Standard parts:

- 4x Cylinder head screw
DIN 912 M4x20
- 2x Flat knurled screw
M4x10
- 2x High knurled screw
M5x12
- 2x Parallel pin
ISO 8734 2m6x20 blank
- 1x High knurled screw
M3 (shortened)



- 1x Spring plunger with thread locking
GN615.3-M4-k-PFB
- 1x Parallel pin
ISO 8734 3m6x12 blank





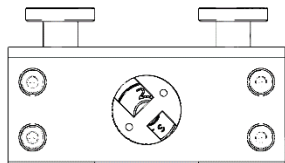
ASSEMBLY

The SEEDMINT will be shipped in a semi-assembled state. The GUIDE is separate within the package. Place the SEEDMINT on a flat surface and insert the GUIDE into the central hole in the RETAINER with the larger cut-out facing left and the two pins facing upwards. After inserting the GUIDE slowly turn it clockwise by applying light torque to the two pins. You will feel four ratchet positions while turning 180° . These are the four 4mm and four 2mm defined stamping positions visualized on the next page.

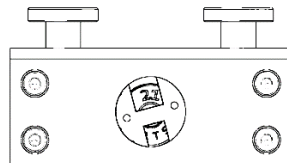
Check that all knurled screws are securely fastened.

Your SEEDMINT is now ready for use.

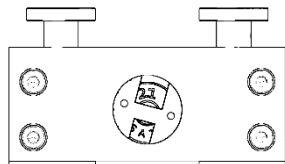
Stamping positions:



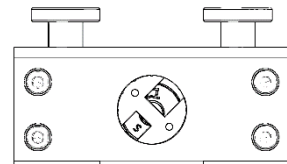
Pos. 1



Pos. 2



Pos. 3



Pos. 4

Deviating from these four positions is possible for a custom layout but not advised for accurately reproducible results.

HANDLING

Let's start off with a test run: this is what the test washer will look like if we were successful in writing a comprehensive manual:



1. Before you start you will need a firm, flat surface to place your SEEDMINT on, a hammer, as well as all parts included in the package.

2. You can start by pulling back the SLIDER and inserting a washer with the rounded edges facing upwards. By pushing the SLIDER back under the RETAINER, the washer will be correctly positioned under the GUIDE.
3. Rotate the GUIDE to position 2 and insert the number "2" 4mm punch into the large cut-out (if you would prefer the numbers to be stamped with a small offset you can also choose position 1 instead).
4. Rest the palm of your left hand (right if you are lefthanded) on the knurled screw on the SLIDER to ensure the SLIDER does not move and stabilize the punch between your thumb and forefinger. Push the punch down against the washer.
5. Now the moment you have been waiting for: We know you really want to WHACK IT but start off with moderate force.

NOTE: It is not advised to stamp the same character twice in the same position on the same washer as this can damage the punches. If you are not happy with the level of penetration you can crank it up on the next washer.

6. Extract the punch and rotate the GUIDE into position 3 and repeat as from bullet point 4. Using the number “1” 4mm punch.
7. Once the index number is stamped, extract the punch, rotate the GUIDE to position 4, insert the first 2mm letter punch “S” and hit it.
8. Positions 3, 2, 1 follow with the 2mm letter punches “A”, “T”, “S” respectively.
9. Pull back the SLIDER and retrieve the washer using a flat headed screwdriver or just flipping the SEEDMINT on its head.
10. Congrats, your first stamped washer is complete!

After you've stamped a few washers, you'll get a feel for the process and start to produce consistent results. Once you feel comfortable it's time to start with an actual seed. For this you can either retrieving a backup of an old seed or securely create a new one and write it down on a piece of paper with the index numbers leading each word. **Take the time to double check each word!**

01	ACTION	[...]	
02	BOSS	23	WILL
[...]		24	WISH

11. Write down all information you'd like to stamp additionally.
12. Be diligent and perfectionistic about your work. You'll thank yourself later.

CARE

The SEEDMINT is a tool, no doubt about it. Beautiful, absolutely, but made to be used. She likes it rough, but she'll need some love and care along the way.

To prevent highly oxidated surfaces and ensure ease of use you should store the SEEDMINT in a dry environment.

Included in the package is a bottle of silicon oil. Before first use after a long time in storage, apply a thin oil film to the contact surfaces between the GUIDE and the RETAINER using a cotton cloth.

A spring plunger is screwed into the RETAINER to provide defined stamping positions to the GUIDE. We carefully adjusted the plunger during assembly to apply the correct amount of force for an easy

but well-defined feel. The correct position over time was ensured by using thread locking glue (LOCTITE 243). At some point you may have to readjust the plunger if the pressure becomes too weak.

With every misguided hammer stroke and every careless contact with another hard object or just with every year that passes by, your SEEDMINT will inevitably gain scars. We always design our products to make form follow function. Because of this the functionality of your SEEDMINT will not be impaired by scratches, dents, or tinted metal surfaces. Depending on your preferences you can chose to polish up the brass with some fine polish past and a cotton cloth to regain that nice and bright new look. We personally prefer our SEEDMINT to have some character and proudly display its history. Your call.

PRIVACY POLICY

We are highly focused on trying to minimize the amount of personal customer data we collect. The following data is unfortunately needed:

At purchase:

- Email address

Once package is ready to be shipped:

- Name and shipping address

All your personal information will be deleted once shipping is complete unless you actively ask us to save your data.

For more details on future customer verification please read section "CONTACT".

CONTACT

In case you have any questions, requests or feedback please do not hesitate to reach out. We are designing all our products for the community just as much as for ourselves. We deeply care about your thoughts regarding our designs as well as our service as we are convinced that we can do nothing but improve through engagement with our community.

As we have set our default policy to delete all personal customer information once the package has arrived, we have included a code in your package which you can provide when contacting us to prove you are a customer.

As a FOSH project we are committed to an open standard with a transparent design process under a permissionless licence. To further drive this project, we are hugely thankful if you consider supporting us:

donate.seedmint21.com

We would love to welcome you to join the customer exclusive chat group “SeedMint Family”:

- Telegram: t.me/+g6MqXO-jKb1kZWYy

As well as our public group “SeedMint Community”:

- Telegram: t.me/SeedMint21

You can contact us via:

- Email: seedmint21@protonmail.com
- Twitter: [@SeedMint21](https://twitter.com/SeedMint21)
[@snicktoshi](https://twitter.com/snicktoshi)
[@antomousB](https://twitter.com/antomousB)
- Telegram: [@SeedMint21](https://t.me/SeedMint21)

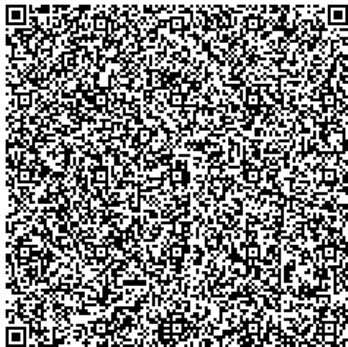
Find all our products at:

store.seedmint21.com

Stay up to date on all future products & developments:

- Twitter: [@seedmint21](https://twitter.com/seedmint21)

We will gladly send you our PGP public key if you shoot us a quick message. Alternatively, you can scan the following QR-code containing our key:



WE TRULY APPRECIATE YOU.

PERSONAL RESPONSIBILITY.

ONE SEED AT A TIME.

SEEDMINT

MANUAL

